

NOAA's Office of Marine and Aviation Operations

Providing environmental intelligence for a dynamic world

NOAA's personnel, ships, and aircraft play a critical role in gathering environmental data vital to the nation's economic security, the safety of its citizens, and the understanding, protection, and management of its natural resources. NOAA's fleet of ships and aircraft is managed and operated by the Office of Marine and Aviation Operations (OMAO), an office comprising civilians, mariners, and officers of the NOAA Commissioned Officer Corps, one of the seven uniformed services of the United States. OMAO civilians and NOAA Corps officers operate, manage, and maintain NOAA's active fleet of 16 research and survey ships and nine specialized aircrafts. Together, OMAO and the NOAA Corps support nearly all of NOAA's missions.

NOAA's fleet is the largest among federal research and survey ships in the nation. The fleet ranges from large oceanographic ships capable of exploring and charting the world's deepest oceans, to smaller vessels responsible for surveying the shallow bays and inlets of the United States. The fleet supports a wide range of marine activities including fisheries surveys, nautical charting, and ocean and climate studies. Based throughout the continental United States, Alaska, and Hawaii, the ships operate in all regions of the nation and around the world.

NOAA's aircraft provide a wide range of airborne capabilities. Our highly specialized Lockheed WP-3D "Hurricane Hunter" aircraft are equipped with a variety of scientific instrumentation, radars, and recording systems for both in situ and remote sensing measurements of the atmosphere, the Earth, and its environment. Equipped with both C-band weather radar and X-band tail Doppler radar systems, the WP-3Ds have the unique ability to conduct tropical cyclone research in addition to storm reconnaissance. Together with NOAA's Gulfstream IV-SP hurricane surveillance jet, these aircraft greatly improve our physical understanding of hurricanes and enhance the accuracy of tropical cyclone forecasts. NOAA's light aircraft also play a vital role in monitoring our environment. Our King Air, Commander, and Twin Otter aircraft support marine mammal population studies, shoreline change assessments, oil spill investigations, and water resource/snowpack surveys for spring flood forecasts.

While manned aircraft and sea-going vessels have been, and will continue to be, a primary source of environmental data, new technology will have a significant role to play in the future NOAA fleet. OMAO, in coordination with other NOAA offices and federal agencies, is evaluating and deploying remotely piloted underwater and aircraft systems that could significantly contribute to environmental observations. To better serve the needs of the nation, NOAA is examining the composition of the fleet through an exhaustive and critical review of at-sea science and observation requirements. Our objective is to develop a clear, cost-efficient path forward to ensure that the NOAA fleet can continue to conduct at-sea surveys and research vital to fisheries management, updating nautical charts, responding to natural and manmade disasters, and understanding coastal and marine systems more fully. Meeting these requirements is essential to developing sustainable, science-based management and conservation plans that protect the health and resiliency of these resources over the long-term.



NOAA's aircraft fleet at OMAO's aircraft operations center in MacDill Air Force Base, Tampa Florida

We continue our efforts to build a civilian and NOAA Corps officer workforce that is uniquely qualified to gather critical environmental intelligence and be adaptive and responsive to a changing world and work to expand our partnerships with other federal agencies. For example, NOAA Corps officers are currently assigned to work in the Department of Defense, National Science Foundation, and the U.S. Senate among others where they lend their expertise and service. We also continue to strengthen our partnership with the U.S. Coast Guard. Our basic NOAA Corps officer training class is held at the U.S. Coast Guard Academy, where newly commissioned officers train alongside Coast Guard officer candidates, developing skills and professional relationships that will benefit both services, especially during challenging times. Active collaboration among the Federal family is critical to ensuring the long-term capability and success of the federal ocean infrastructure. Our partners' success is our success.

For more information, please visit: www.noaa.gov, and www.noaacorps.noaa.gov, and www.noaacorps.noaa.gov,



FY 2016 Budget Request Highlights



The FY 2016 President's Budget Request for OMAO is \$400,036,000. The request makes investments to maintain and expand the NOAA fleet in support of more robust stock assessments, faster updates to nautical charts, and well maintained buoy networks. The program changes noted below are with respect to the FY 2016 Base (= FY 2015 Enacted + Inflationary Adjustments). Highlights include:

- Ocean Survey Vessel (OSV) Construction (+\$147.0M) This request will begin development of one OSV, a vessel designed to conduct surveys throughout the U.S. Exclusive Economic Zone. The OSV has a more diverse range of capabilities and functions than other vessels in the NOAA fleet and is capable of meeting a variety of NOAA's missions such as: surveying marine mammal populations; collecting samples and observations to support ecosystem-based management activities; conducting oceanographic and climate research; mapping the ocean floor to update nautical charts; and servicing National Weather Service's buoys. With this investment, NOAA will leverage the Navy's existing Auxiliary General Oceanographic Research Vessel system specifications, which will reduce design risk, provide cost savings, and increase the ability for cross-government research opportunities. Without this investment to retain current mission capacity and expertise, the NOAA fleet will decline by 50 percent from 16 to 8 active ships between FY 2016 and FY 2028.
- Progressive Lifecycle Maintenance Program (+ \$5.7M) The requested increase of \$5.7M will stabilize and improve the material condition of our ships and result in a fleet maintained at a higher state of readiness, an extension of service life, and avoidance of mechanical, structural, and mission equipment obsolescence.
- Days at Sea The total request of \$178.8M supports a total of 3,220 OMAO funded Days at Sea, with a ship utilization rate of about 86 percent, to support critical *in situ* collection of oceanic, hydrographic, and fisheries data.
- Aviation Operations The total request of \$32.3M supports 4,063 OMAO funded flight hours of critical real time observations.



National Oceanic & Atmospheric Administration